

Date: Sun, 23 May 93 03:37:47 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #628
To: Info-Hams

Info-Hams Digest Sun, 23 May 93 Volume 93 : Issue 628

Today's Topics:

Daily Solar Geophysical Data Broadcast for 22 May
DJ-580t & FT-530 opinions
Looking for comments on Alinco DJ580
making photosensitized circuit boards
Question: Can a novice take the extra test?
radio-related laws and general info for Pittsburgh, PA?
Radio Shack 70cm HT?
re:HTX 202 tones
Recommendations wanted for SAT QSO's
RFI from ZyXEL modem to 2way radio
unsubscribe
YAPP software wanted

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: 23 May 93 05:21:31 GMT
From: news-mail-gateway@ucsd.edu
Subject: Daily Solar Geophysical Data Broadcast for 22 May
To: info-hams@ucsd.edu

!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 142, 05/22/93
10.7 FLUX=091.8 90-AVG=123 SSN=022 BKI=0101 0011 BAI=001
BGND-XRAY=A9.0 FLU1=1.4E+06 FLU10=1.3E+04 PKI=1111 1222 PAI=005
BOU-DEV=002,009,003,008,002,002,006,006 DEV-AVG=004 NT SWF=00:000
XRAY-MAX= B2.7 @ 2305UT XRAY-MIN= A7.3 @ 0143UT XRAY-AVG= B1.1
NEUTN-MAX= +000% @ 0000UT NEUTN-MIN= +000% @ 0000UT NEUTN-AVG= +0.0%

PCA-MAX= +0.0DB @ 0000UT PCA-MIN= +0.0DB @ 0000UT PCA-AVG= +0.0DB
BOUTF-MAX=55394NT @ 1246UT BOUTF-MIN=55351NT @ 1747UT BOUTF-AVG=55383NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+000,+000,+000
GOES6-MAX=P:+147NT@ 1619UT GOES6-MIN=N:-071NT@ 0112UT G6-AVG=+113,-013,-044
FLUXFCST=STD:095,100,100;SESC:090,090,090 BAI/PAI-FCST=005,005,005/010,010,010
KFCST=2213 3111 2213 3112 27DAY-AP=013,007 27DAY-KP=3344 2232 1232 2222
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 21 MAY 93 was 66.0.
The Full Kp Indices for 21 MAY 93 are not available.

Date: Sun, 23 May 1993 05:25:56 GMT
From: swrinde!gatech!howland.reston.ans.net!agate!news.ucdavis.edu!
othello.ucdavis.edu!ez006683@network.UCSD.EDU
Subject: DJ-580t & FT-530 opinions
To: info-hams@ucsd.edu

gary@ke4zv.uucp (Gary Coffman) writes:
: In article <1993May21.185647.16880@news.columbia.edu>
mac20@cunixf.cc.columbia.edu (Michael A Cecere) writes:
:
: >Plus, i've been inside both radios and the yeasu is much prettier, and easier
: >to take apart then the alinco. just looks like it was put together with
: >more experience.
:
: Second that. While Alinco mobile rigs are the cost/performance leaders
: in my book, they aren't as pretty inside as a Yeasu or Icom. No, I promise
: I won't say the usual bad things about Kenmore..err Kenwood VHF/UHF radios.

Our TH-78A doesn't look too bad on the inside! But it isn't nearly as nice
as my old '470!

: >I'm hoping to switch my 470 with my fathers' 530, maybe he won't notice

Watch out or your dad may try to switch his '530 for your '470!! :-)

:
: Try to compare them side by side in actual operating situations. I'd
: be interested in hearing a first hand report on usability of the two
: in high intermod areas, with non-reciprocal repeaters, with their
: accessories, and in regard to relative battery life.
:
: In handling a 530 in the store, I noticed that it seemed wider than the
: 470 and more difficult to manipulate with one hand, at least for me.
: That would vary with hand size I guess. Again a side by side comparison

: might be helpful.

And the battery mount is about .5 mm different than the '470's which is the same as the 411, 811 and 911 (I believe) I think it is the same as the FT-X15 series. My friend was disappointed when he found out the batteries were that close but not quite right.

Dan

--

* Daniel D. Todd Packet: KC6UUD@WA6RDH.#nocal.ca.usa *
* Internet: DDTODD@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *

* I do not speak for the University of California.... *
* and it sure as hell doesn't speak for me!! *

Date: Sun, 23 May 1993 01:04:00 GMT
From: swrinde!zaphod.mps.ohio-state.edu!darwin.sura.net!knuth.mtsu.edu!raider!
theporch!jackatak!martinbw@network.UCSD.EDU
Subject: Looking for comments on Alinco DJ580
To: info-hams@ucsd.edu

tbodoh@resdgs1.er.usgs.gov (Tom Bodoh) writes:

>
> --
> Hello,
>
> I'm going for my ticket on Saturday and am looking at the Alinco
> DJ-580T. I have several questions and am hoping that someone can offer
> some firsthand answers;
>
> o I've sold my scanner, hoping that the HT that I buy can take it's
> place - for scanning VHF-HI, AIR, UHF and 800 Mhz. As rated,
> the 580 receives 130-174 Mhz and 420-480 Mhz. Alinco sent me the
> air band mod - but I've seen references in ads to 800 Mhz
> coverage. How is that added? How good is reception in the
> extended coverage frequencies - as far as imaging, etc?

I hope you made it and welcome. You should have kept your scanner.

>

- o Alinco sent me a note that states "...BUT THE FCC DOES NOT ALLOW US TO GIVE OUT MODIFICATION INFO ON EXTENDED TX AND RX WITHOUT VERIFICATION OF M.A.R.S OR C.A.P.S LICENSE.". While (like most hams) I have no plans on transmitting in these frequencies it would be beneficial in an emergency. I can understand why the FCC wouldn't want them to give out the secret, but why does Alinco go along with the request - is it a requirement written into their certification for the 580? And do they really mean that the FCC tells them not to give out extended RECEIVE mods - or does the same mod open up TX and RX?

While it is possible to modify the DJ-580 to expand both RX & TX I do not recommend either of them. I did them both and later retrofitted the mods. Intermod can be a bit of a problem with this rig and modifying it will just make it worse. There is something to be said for a rig that only operates in band like the Radio Shack HTX-202.

- o Alinco also states in their letter that transmitting in the extended ranges may fry the rig. How likely is this? I don't plan on using it in those ranges, but it would be nice to know - also can you set a memory channel up so that you can receive but not transmit?

I do not think that this is the case but have not tried it.

> o How do you like the radio overall?

Overall i like mine. I only wish there was an option to increase the memory and/or connect it to my computer to be able to program the freqs.

- o Is this HT severe overkill for a newcomer (with 25 years of radio, electronics and computer experience) or only moderate overkill? ;)

I think it is a good choice.

- > o Have there been any reviews of this radio either in the magazines
> or on the net?

Yes. In Jan or Feb issues of QST or CO. I do not remember which.

* Bruce W. Martin Internet: martinbw@jackatak.raidernet.com *
* 4558 Brooke Valley Dr. AOL: Dragon16 *
* Hermitage TN 37076-2650 HAM Call: KQ4TV *
* Voice: (615) 872-9942 Work: (615) 244-2022 *

* FAX/MODEM: (615) 885-4182

*

Date: Sun, 23 May 1993 06:08:52 GMT
From: usc!howland.reston.ans.net!agate!headwall.Stanford.EDU!Csli!
kawai@network.UCSD.EDU
Subject: making photosensitized circuit boards
To: info-hams@ucsd.edu

Dear all

Some days ago, I asked if anyone has ideas about making printed circuit boards from positive artwork.

I'd like to thank everyone who suggested methods on how to solve my problem. Some of you suggested using a scanner to scan in the positive artwork, then using a graphics program to revert black and white, and finally printing the reversed image on a laser printer. I decided against this, because the scanner I have access to is not very precise, resulting in shrunk or elongated images. It's not very sensitive, either, so small dots (which show where holes should be drilled on the board) are often missed.

I searched for photosensitized circuit boards with positive-reacting resists. A person on the net suggested I call Active Electronics. I did so, and found that GC Thorsen manufactures pre-sensitized boards (which you expose to ultraviolet light and then develop) and photosensitive resist (which you coat bare copper-clad boards with to make your own pre-sensitized boards). The disadvantage of GC Thorsen's products is that they use corrosive chemicals in the developing process.

I was becoming rather down-hearted with all this. Luckily, yesterday I found a photocopy shop in San Jose that makes negative copies -- that is, black images come out white, and vice versa. (I learned that most large photocopy shops have machines that have this capability.) I brought the original positive artwork along with semi-transparent paper (Ricoh "TA Intermediate" PPC photocopier paper -- milky white, tracing paper for drafting) and had them make negative photocopies. Cost: a quarter a sheet.

On a related issue, I tried making my own negative-reacting photosensitized boards last night, using Datak's photosensitive-resist. Results were disappointing. I could not get the images to print clearly. Besides, both resist and developer smell a great deal (similar to paint thinner). After watching last night's "20-20" program on how paint thinner can cause permanent brain damage, I certainly don't want to risk any more, especially since my brain is probably already half-fried with RF from my HT.

Datak's products are not cost-effective, in my opinion. Better to go with Kepro, my favorite brand. Excellent results every time. Easy to use, too, because Kepro uses aqueous-based, non-corrosive, non-smelly, mild chemicals. All you need is sunshine, hot water, a sink, and a pair of scissors.

So, what did I learn? The bottom line: use Kepro's dry photo-resist. Kepro only makes boards with negative-reacting photoresists, so if you have positive artwork, go to Copymat and get a negative copy! If you don't have Ricoh "TA Intermediate" paper, overhead transparencies are probably acceptable (I've never tried them, though).

I've given up on making my own photosensitized boards unless somebody can show me how. Following the manufacturer's directions did not yield satisfactory results. Even if I learn how to do it right, I may not be convinced it's worth the trouble. The hydrocarbon fumes are a hazard. Besides, the difference in cost between home-made photosensitized boards and store-bought ones is not a whole lot. Granted, store-bought boards cost twice as much -- which is why I tried making my own in the first place -- but a couple of dollars more per board is cheaper, considering the effort you have to put in to make the boards. (You have to do it in a dark place, and bake the boards in the oven to make the polymer stick to the copper.)

Hope this info helps someone.

----- Speech Research Program, SRI, Menlo Park, CA 94025-3493 USA
--- Goh Kawai --- work:(415)859-2231 fax:(415)859-5984 home:(415)323-7214
----- internet: kawai@speech.sri.com radio: n6uok and 711fqe

Date: 23 May 93 01:39:20 GMT
From: news-mail-gateway@ucsd.edu
Subject: Question: Can a novice take the extra test?
To: info-hams@ucsd.edu

well, first some quotes...

>ksampath@magnus.acs.ohio-state.edu (Krishna S Sampath) writes:
>>the subject says it. assuming that the novice has 20 wpm cw, can the ham
>>take the extra test?
>
>Yes, a novice may take the Extra written exam. However, all the intervening
>written elements must be taken (and passed) first. That is, you can't
>leapfrog the Tech, General and Advanced elements; the elements must
>be taken and passed in ascending order.
>--
>Todd N. Tolhurst, WA1M | "What do you care what other people think?"

>The local ARRL-VEC-affiliated VEs would not administer the Extra written
>unless there is proof that you have passed the Advanced written. But there
>is nothing to stop one from taking all the written tests, starting from
>the Novice written, in a single sitting.

>However, they will administer the 20 wpm code test without your having
>passed the 13 wpm, or even the 5 wpm. In fact, they seem to encourage
>people to try for the higher code speeds anyway, since many people seem
>to be capable of faster code than they imagined.

>Kok Chen, AA6TY kchen@apple.com

>-----

The information above is wrong. it's meant well, but not on the money.

I know this because we didn't correctly allow someone with a single element credit 610 (novice element 2) into an exam in May. Due to the personality conflict involved, the correct answer wasn't located at the session but rather discovered later. (It's hard to read the VE book when you've got someone in your face...as it was, we ended up with egg on ours. It was the first time we'd seen this that I could even recall so we were overly suspicious).... but it was because I had to look that up that I also found this:

you can take any exam element in any order. when you get enough together within a year to get a license, you get a license.

you don't have to have 2, 3A, 3B, 4A credit to take 4B and pass it.

You have to have 2, 3A, 3B, 4A, 4B and 1C credit to get the extra.

check it out...i had to read it a couple of times myself. I think i have it right now.

what's going on is the VECs only send a job to the FCC when it's complete. this "insulation" permits people to take any tests for any license in any sequence although going in ascending order is probably preferred because you'll get licensed sooner.

but if you want to start out as an extra, you could pass 4B, 4A, 3B, 3A, 1C, 2 in that order over a period of a year and your first license would be an extra. (the code has to come before element 2 to prevent a tech license from being issued because of the 3A credit...certainly it could be passed anywhere along the line as long as it was before element 2.)

I was all wet earlier today, but i don't think the engineering picnic water balloon fight has affected my recall of the current set of rules that are in effect now. It used to be true you had to proceed in order. the "orange" ARRL VE book has that different today.

bill wb9ivr%pubs%genav.mlb@banyan9.cacd.cr.rockwell.com

wb9ivr%pubs%genav.mlb@ns14.cca.cr.rockwell.com
wenewkir@crems.cr.rockwell.com
wen@dllws.cca.cr.rockwell.com
---->[{} Pies accepted at the rear door. make mine pumpkin.

Date: 23 May 1993 00:45:21 -0400
From: sdd.hp.com!nigel.msen.com!heifetz!mbsun.mlb.org!mudos!mudos!not-for-mail@network.UCSD.EDU
Subject: radio-related laws and general info for Pittsburgh, PA?
To: info-hams@ucsd.edu

I'm going to be moving to Pittsburgh, PA in August of this year to attend Carnegie-Mellon University, and I'm interested in the general situation with regard to scanners, ham radio, etc. Some of the questions I have:

1. What kind of radio system does the Pittsburgh police use?
Old-style VHF or UHF simplex? 800MHz trunked? Some weird combination of both? How about ambulance services and fire departments? PA Highway Patrol/State Police?
2. Are radar detectors legal in Pennsylvania?
3. How about mobile scanner use? If it's illegal, is there an exception for licensed hams?
4. Any other interesting radio-related laws, regulations, or trivia?

--
Marc Unangst, N8VRH | "People who love sausage and respect the law
mju@mudos.ann-arbor.mi.us | should never watch either one being made."
| -The Sausage Principle

Date: 22 May 93 09:24 CDT
From: swrinde!cs.utexas.edu!uwm.edu!caen!sol.ctr.columbia.edu!news.kei.com!
news.oc.com!utacfd.uta.edu!trsvax!trsvax!rpo@network.UCSD.EDU
Subject: Radio Shack 70cm HT?
To: info-hams@ucsd.edu

The policy...which we repeat several times a year in the store newsletter and also in training classes...is to never knowingly sell any license-required transceiver to someone who expresses an intent to use the radio without getting a license. This includes the GMRS, Business-Band, and Amateur radios.

There is no legal requirement for showing proof of license. Also, there is case precedent against refusing to sell a transceiver solely on the basis of no current license. (You can buy a car if you don't have a driver's license...you just can't drive it off the lot.) Requiring a license would eliminate being able to purchase a rig for someone else as a gift, getting a rig after you test but before you receive your ticket, and other legit customers.

Paul Opitz (N5TPQ)
Radio Shack Publications

Date: 23 May 1993 03:30:30 GMT
From: swrinde!cs.utexas.edu!uwm.edu!rpi!vccnw06.its.rpi.edu!
maessm@network.UCSD.EDU
Subject: re:HTX 202 tones
To: info-hams@ucsd.edu

In article <C7E4B2.tx@cbnews1.cb.att.com>, dara@cbnews1.cb.att.com (s.b.darack) writes:
> an HT. Now, what was the hook up for packet?

Same hookup as any of the Icom single band HTs, or any of the Yaesu HTs (excluding the models before the FT-203 and possibly the FT-530).

--
Mat Maessen N2NJJ | maessm@rpi.edu

----- +
disclaimer: Anyone NOT singing will have a can of Foster's lobbed at
their heads.

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Date: 22 May 1993 21:22:57 -0500
From: swrinde!cs.utexas.edu!not-for-mail@network.UCSD.EDU
Subject: Recommendations wanted for SAT QSO's
To: info-hams@ucsd.edu

> three big trademarks. You may choose either Yaesu or Icom. BUT FORGET
> KENWOOD. They advertise their multi-band-mode rig as great satellite radio,
> but it is a fake. It can't even reverse track in satellite mode!!
> (Almost all satellite xponders are inverting...)

You must not mean the Kenwood TS790A.

That model is able to tune both uplink and downlink at the same time and in "opposite" directions. Even stores the "constants" for A013, A010, etc. Nice radio.

Peter Laws,
N5UWY / V31WY / VE2???
President,
Amateur Radio Club,
University of Arkansas
W5YM

Peter Laws|GENie:P.LAWS1|"The '90s are gonna make the '60s|plaws@uafhp.uark.edu
n5uwy@ka5bml.ar.usa.noam| look like the '50s" --D. Hopper|plaws@uafsysb.bitnet

Date: Sun, 23 May 1993 02:24:54 GMT
From: swrinde!zaphod.mps.ohio-state.edu!sol.ctr.columbia.edu!destroyer!cs.ubc.ca!
newsserver.sfu.ca!sfu.ca!tpang@network.UCSD.EDU
Subject: RFI from ZyXEL modem to 2way radio
To: info-hams@ucsd.edu

dogbowl@dogbox.acme.gen.nz (Kennelmeister) writes:
>It doesn't. If you look at the label and the manual, you'll find
>that it's FCC class A.
Sorry that I might have forgotton to specify the model I have.
I just read the manual, which stated the U-1496 and U-1496B are Class A,

[nickel spray]
>"Electrolube" and is made in the UK.

Anyone knows what are the equivalent in North America, and where?

Thanks for the advise. I got answer about conductive spray, don't know if they are the same, but I'll definitely do something similar to that.

>NOTE: You have probably just voided the modem's warrenty by spraying
> the case. You'll definitely void it if you go near the PCB
> with a soldering iron

Which is exactly what I'll be doing anyway, I am modifying it.

>--
>Alan Brown
>dogbowl@dogbox.acme.gen.nz

Good grounding and shielding are good ways, just that the manufacturers should do some average jobs.

Thanks again.

Regards,
David

In real life: David Tse	E-mail: tpang@sfu.ca (Internet)
Snail Mail: P.O. Box 26052, Richmond, B.C., V6Y 1Z3, Canada	
Home: Amiga A3000/25/100/6 + AMaxII + ZyXEL U-1496E + HP DeskJet PLUS	

Date: 23 May 93 10:36:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: unsubscribe
To: info-hams@ucsd.edu

unsubscribe
quit

Date: Sun, 23 May 1993 05:24:52 GMT
From: usc!howland.reston.ans.net!noc.near.net!lynx!sehrlich@network.UCSD.EDU
Subject: YAPP software wanted
To: info-hams@ucsd.edu

Greetings.

I asked this question on rec.radio.amateur.packet, but got no response, so I thought I'd try here.

I am looking for an FTP site which has YAPP on it.

Thanks much.

Scott, WY1Z

--
=====

Scott Ehrlich	Internet: wy1z@world.std.com
Amateur Radio: wy1z	Packet Radio: wy1z@k1ugm.ma.usa.na

=====

Date: Sun, 23 May 1993 02:54:22 GMT
From: valinor.mythical.com!n5ial!jim@uunet.uu.net
To: info-hams@ucsd.edu

References <15051@news.duke.edu>, <1993May19.190231.10108@news.acns.nwu.edu>, <1993May20.163433.25796@peavax.mlo.dec.com>4
Subject : Re: Signal report etiquette

In article <1993May20.163433.25796@peavax.mlo.dec.com> reisert@mlo.dec.com writes:

>I generally give out 3 signal reports:

>
> 59(9) perfect copy
> 57(9) not strong but I can copy everything
> 55(9) very weak, but can exchange reports OK

Back when I was using my former HF rig, a Galaxy V Mk III, the S-meter was basically useless...someone next door could be running a kW with an unbroken cw carrier (i.e., tuning up, etc.), and it wouldn't reach S9..... So, as y'all can no doubt imagine, I improvised (very similar to the above, except using the full extent of the scale). I did something like this:

599 perfect copy
579 perfect copy, but not as loud as what I called 599
559 good clean copy, but perhaps a few minor problems here and there
[1-5]39 getting tough to copy now (readability now varies) ... when it's at this level on my scale, it's time to hang it up.

Now, with the Kenwood TS-140S (mind you, running AMTOR and PacTOR instead of cw), the above scale seems to fit exactly what I see on the meter on the rig....don't know if that's a coincidence or not. :-)

>If the DX station is working them fast, and giving out 59's to
>everyone, you should do the same. Chances are the DX is going to log
>the received report as 59(9) anyway, especially if s/he's using
>computer logging.

I'd have to agree with this, too. Remember....DX types and contesters don't use signal reports for anything---they don't really care what the signal strength is, just as long as it's there. Of course, if I'm trying to work someone, and they give me a 599 and then asks me to repeat something because they can't copy it (because I'm too weak), I tend to ask (with tongue in cheek and a big grin on my face) why I'm too weak to copy if I'm a 599....

Gotta run....

--jim

--
#include <std_disclaimer.h> 73 DE N5IAL (/4)

INTERNET: jim@n5ial.mythical.com | j.graham@ieee.org ICBM: 30.23N 86.32W
AMATEUR RADIO: n5ial@w4zbb (Ft. Walton Beach, FL) AMTOR SELCAL: NIAL

E-mail me for information about KAMterm (host mode for Kantronics TNCs).

Date: Sun, 23 May 1993 03:16:06 GMT
From: sdd.hp.com!portal!ttolh@network.UCSD.EDU
To: info-hams@ucsd.edu

References <1tjbru\$1rm@charm.magnus.acs.ohio-state.edu>,
<1993May22.083124.7779@samba.oit.unc.edu>, <jfhC7G3A4.3HK@netcom.com>
Subject : Re: Question: Can a novice take the extra test?

In article <jfhC7G3A4.3HK@netcom.com> jfh@netcom.com (Jack F. Hamilton) writes:
>Several people have made that comment, but 97.501 says only that certain
>tests must be passed in order to get a particular grade of license. It
>doesn't say that they have to be taken in order.
>
>So why couldn't he take the tests in the order 4B 4A 3B 3A if he so
>desired, or take only the 4B? He wouldn't get an Extra license, of course,
>but that's not what he asked - he asked about taking the test, not about
>getting a license.

>Jack Hamilton KD6TTL jfh@netcom.com PO Box 281107 SF, CA 94128 USA

Bill Newkirk, WB9IVR has pointed out to me that the latest edition
of the ARRL Volunteer Examiner Manual now allows a VE team to use
its discretion in administering written elements out of order.

Up through the 5th Edition of the VE manual, VEs were required
to administer written elements in ascending order only.

The best course to follow for a candidate who wishes to take written
elements out of order is to contact the VE team leader before the exam
and ask if they'll allow you to do so. If they say they *can't* give
you the exam, point them to page 55, column 2, paragraph 3 of the
6th Edition VE Manual.

--
Todd N. Tolhurst, WA1M | "What do you care what other people think?"
Waterbury, CT | -- Richard Feynman

ttolh@shell.portal.com |

End of Info-Hams Digest V93 #628
